

2. Leveling:

- a. To level fuselage laterally, prop up the wing tips and test for horizontal on fuselage members, see Figure 3.
- b. To level longitudinally, prop up the tail and test for horizontal on the top longeron of fuselage aft of wing, see Fig. 3.

3. Rigging:

- a. The proper dihedral angle and angle of incidence are built into the wing and fuselage at the factory.
- b. Elevator and rudder control system rigging is accomplished by turn-buckles on the cables. Elevator cables are rigged to  $30 \pm 5$  pounds tension. Rudder control system-tension is maintained by springs on rudder pedals. Cables should be rigged with turnbuckle threads flush with the barrel. Double-wrap turn-buckles in accordance with FAA Manual No. AC43.13-1, Figure 4.5, or MS33591.
- c. The Dive-brake/wheel-brake control linkage should be rigged so that there is no slack or lost motion when control is started. The wheel-brake cable is rigged so that the brake arm is actuated at the last 1-1 1/2" of control rod travel (after the dive-brakes have been effectively opened.)
- d. Tow hook release spring tension is checked by applying a force of 6-12 lbs. at the end of the release arm. The hook should then release. If the tension is not within this tolerance, the spring should be replaced. See Figure 2.

PREFLIGHT INSPECTION:

1. Inspect the following for condition, operation, security of attachment and/or other signs of failure.
  - a. Wing and attachment bolts.
  - b. Struts and strut attachment bolts.
  - c. Stabilizer struts and attachment bolts.
  - d. Stabilizer.
  - e. Elevator.
  - f. Fin.
  - g. Rudder.
  - h. Fuselage covering and structural tubing.
  - i. Control cables.
  - j. Controls and control system push rods.
  - k. Ailerons.
  - l. Dive-brakes and controls.
  - m. Main wheel and brake.
  - n. Tire (maintain tire pressure at 15 lbs.)